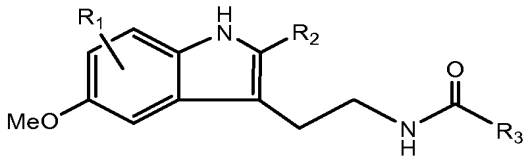
*AMENDMENTS TO THE CLAIMS*

Claims 1-36 (Canceled).

37. (Currently Amended) A compound of the formula




wherein

$R_1$ is ~~hydrogen,~~ a halogen or nitro,

$R_2$ is $C_4$-$C_{20}$ aryl, and

$R_3$ is $C_1$–$C_{30}$ alkyl, $C_2$–$C_{22}$ alkenyl, $C_4$-$C_{20}$ aryl, $OR_4$, $SR_4$, $NR_4R_5$, $(CH_2)_nOR_4$, $(CH_2)_nSR_4$, $(CH_2)_nNR_4R$ or $(CH_2)_nCOR_5$ wherein n is 0-10[[;]], and $R_4$ and $R_5$, which can be the same or different, are hydrogen, $C_1$-$C_8$ alkyl, $C_1$-$C_6$ alkenyl or $C_4$-$C_{10}$ aryl.

38. (Previously Presented) The compound of claim 37, wherein $R_3$ is $C_1$-$C_6$ alkyl or $C_1$-$C_6$ alkoxy.

39. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is methyl.

40. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is ethyl.

41. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is cyclopropyl.

42. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is cyclobutyl.

43. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is methoxy.

44. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is ethoxy.

45. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is amino.

46. (Currently Amended) The compound of claim 37, wherein ~~$R_1$ is hydrogen,~~ $R_2$ is $C_4$-$C_{20}$ aryl[[,]] and $R_3$ is dimethylamino.

47. (Previously Presented) The compound of any of claims 38-46, wherein $R_2$ is selected from the group consisting of phenyl, 4-(fluorophenyl), 3-(fluorophenyl), 2-(fluorophenyl), 4-(chlorophenyl), 3-(chlorophenyl), 2-(chlorophenyl), 4-(methylphenyl), 3-(methylphenyl), 2-(methylphenyl), 4-(methoxyphenyl), 3-(methoxyphenyl), 2-(methoxyphenyl), 4-(ethoxyphenyl), 3-(ethoxyphenyl), 2-(ethoxyphenyl), 4-(vinylphenyl), 4-(acetylphenyl), 3-(acetylphenyl), 2-(acetylphenyl), 4-(trifluoromethylphenyl), 3-(trifluoromethylphenyl), 4-(trimethylsilylphenyl), 3-(trimethylsilylphenyl), 4-(methylthiophenyl), 4-(*tert*-butylphenyl), 4-(dimethylaminophenyl), 4-(ethylphenyl), 4-(benzoxyphenyl), 4-(biphenyl), 2-furanyl, 2-(thiophenyl), 2-(5-methylthiophenyl), 3-(thiophenyl), 2-(indolyl), 1-(naphthalenyl), 2-(naphthalenyl), 4-(dibenzofuranyl), 1-(thianthrenyl), 2,3-(dichlorophenyl), 2,5-(dichlorophenyl), 3,4-(dichlorophenyl), 3,5-(dichlorophenyl), 2,3-(difluorophenyl), 2,4-(difluorophenyl), 2,5-(difluorophenyl), 2,6-(difluorophenyl), 3,4-(difluorophenyl), 3,5-(difluorophenyl), 3,5-(dibromophenyl), 3,5-(bis(trifluoromethyl)phenyl), 2,3-(dimethylphenyl), 2,5-(dimethylphenyl), 2,6-(dimethylphenyl), 3,5-(dimethylphenyl), 2,4-(dimethoxyphenyl), 2,5-(dimethoxyphenyl), 3,4-(dimethoxyphenyl), 2,3,4-(trimethoxyphenyl), 2,4,6-(trifluorophenyl), and 2,3,4,5,6-(pentaflurophenyl).

48. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(4-fluorophenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.

49. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(5-methoxy-2-methoxyphenyl-1H-indol-3-yl)ethyl)acetamide.

50. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(5-methoxy-2-p-tolyl-1H-indol-3-yl)ethyl)acetamide.

51. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(4-tert-butylphenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.

52. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(3-trifluoromethylphenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.

53. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(4-trifluoromethylphenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.

54. (Withdrawn) A method for preparing the compound of claim 37, comprising reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

55. (Withdrawn) A method for preparing the compound of claim 38, comprising reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

56. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 37 and a pharmaceutically acceptable carrier or diluent.

57. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 38 and a pharmaceutically acceptable carrier or diluent.

58. (Previously Presented) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 37.

59. (Previously Presented) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 38.

60. (Previously Presented) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 37 and a pharmaceutically acceptable anesthetic carrier.

61. (Previously Presented) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 38 and a pharmaceutically acceptable anesthetic carrier.

62. (Withdrawn) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

63. (Withdrawn) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

64. (Withdrawn) The method of claim 63, wherein said administering step is completed by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

65. (Withdrawn) The method of claim 64, wherein said administering step is completed by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

66. (Withdrawn) A method for treating sleep disorders or chronobiological disorders in a patient, comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

67. (Withdrawn) A method for treating sleep disorders or chronobiological disorders in a patient, comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

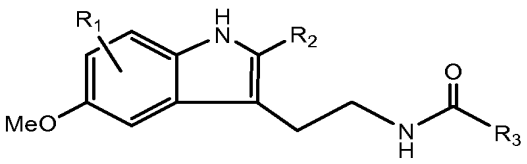
68. (Withdrawn) A method for treating a condition affected by melatonin activity in a patient, comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

69. (Withdrawn) A method for treating a condition affected by melatonin activity in a patient, comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

70. (Withdrawn) The method of claim 69, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

71. (Withdrawn) The method of claim 70, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

72. (Currently Amended) A compound of the formula




wherein

$R_1$ is ~~hydrogen or~~ a halogen,

$R_2$ is $C_4$-$C_{20}$ aryl, and

$R_3$ is $C_1$–$C_{30}$ alkyl, $C_2$–$C_{22}$ alkenyl, $C_4$-$C_{20}$ aryl, $OR_4$, $SR_4$, $NR_4R_5$, $(CH_2)_nOR_4$, $(CH_2)_nSR_4$, $(CH_2)_nNR_4R$ or $(CH_2)_nCOR_5$ wherein n is 0-10[[;]], and $R_4$ and $R_5$, which can be the same or different, are hydrogen, $C_1$-$C_8$ alkyl, $C_1$-$C_6$ alkenyl or $C_4$-$C_{10}$ aryl.

73. (New) The compound of claim 37, wherein $R_2$ is a substituted $C_4$-$C_{20}$ aryl.

74. (New) The compound of claim 73, wherein the substituted $C_4$-$C_{20}$ aryl is substituted by one or more of halogen, $C_1$-$C_6$ alkoxy, amino, alkylamino, thiol, alkythiol, hydroxyl, -CHO, $-NO_2$, phenyl, vinyl, -CN, $Si(CH_3)_3$, $-OCH_2O-$, or combinations thereof.

75. (New) The compound of claim 72, wherein the $R_2$ is a substituted $C_4$-$C_{20}$ aryl.

76. (New) The compound of claim 75, wherein the substituted $C_4$-$C_{20}$ aryl is substituted by one of more of halogen, $C_1$-$C_6$ alkoxy, amino, alkylamino, thiol, alkythiol, hydroxyl, -CHO, -$NO_2$, phenyl, vinyl, -CN, $Si(CH_3)_3$, -$OCH_2O$-, or combinations thereof.

This listing of claims replaces all prior versions and listings of claims in the application.